

Enhanced Work Planning at Oak Ridge

Issue 2

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EWP Success: Y-12's Job Package Improvement Process

Dramatic improvements in the quality of planning and work packages have been realized as a result of the Facility Maintenance Organization's (FMO) "Job Package Improvement Process." Instituted for all maintenance planning activities across the Y-12 plant, the process is helping those involved with preparing job packages continually improve the quality of their work and reduce mistakes.

As a result of the Job Package Improvement Process, more than a ten-fold decrease in job package technical and administrative errors/omissions has been documented in 1997. The overall improvements in the work packages have resulted in jobs being completed with fewer "eleventh hour" delays, better worker awareness of safety and technical issues for the work at hand, and increased job documentation and feedback.

The process entails a detailed review by each supervisory planning specialist of at least one job package per week prepared by those planners in his or her group. As there are currently about sixty Y-12 FMO planners assigned to one of six specialty groups (e.g., carpentry, electricity/electronics), about six packages per week are chosen for detailed review. This

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Oak Ridge-Wide EWP Steering Committee Established

Representatives from DOE-ORO, Y-12, ORNL, ETPP, MK-Ferguson, BNFL, OCAW, and corporate LMES recently formed a Reservation-wide EWP Steering Committee at Oak Ridge. The Committee was formed to:

- Ensure that the definition of EWP and its key principles are understood and applied by all DOE-ORO contractor and subcontractor organizations.
- Promote the institutionalization and expansion of a consistent EWP program throughout the Oak Ridge complex.
- Provide an active avenue for DOE-ORO organizations to share work control ideas, lessons learned, tools, and work products as well as to disseminate EWP achievements and successes.
- Incorporate best practices as a means to identify effective private-sector processes against which projects can be benchmarked to ensure continuous improvement.
- Assist in integrating EWP with other initiatives (e.g., Integrated Safety Management, Voluntary Protection Program, Self-Assessment).

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Job Hazard Analysis Initiative Launched

The EWP Steering Committee has undertaken an initiative to enhance the job hazard analysis (JHA) process used across the Oak Ridge Reservation. Using proven EWP methods, Steering Committee members representing organizations from Y-12, ETTP, ORNL, MK-Ferguson, and BNFL are working together to accomplish the following objectives:

- Baseline the various JHA processes used by the different Oak Ridge Reservation organizations.
- Benchmark these processes against contemporary standards of care as adopted by DOE-ORO, other organizations across DOE, and private industry.
- Evaluate existing policies, procedures, and automated tools for suitability (such as the Hanford JHA software and the Oak Ridge Work Planning and Permitting Information System).
- Formulate a consistent, enhanced JHA process by incorporating the best elements of the various methods and tools examined.
- Incorporate the enhanced JHA process into the various work control systems at Oak Ridge so that injury and illness statistics and productivity measures can be improved.

Fostering consistency in the JHA processes used by the many Oak Ridge organizations is a key purpose of this initiative. While consistency solely for consistency's sake is not the goal, it is anticipated that many important benefits may be derived by establishing and adhering to a more uniform JHA process. These benefits include:

- A less varied and confusing work control process for new employees or those transferring from one site or organization to another.
- Improved ability to transfer safety and health-related "lessons learned" between separate Oak Ridge organizations.
- An easier process to monitor by those managers responsible for ensuring policies and procedures are being properly followed throughout the Reservation.
- Increased defensibility of the JHA processes associated with similar hazard and complexity levels from one organization to another.
- Prompt availability of an improved, innovative JHA process for all organizations seeking one.

Especially with the imminent arrival of the new management and integrating contractor at ETTP, literally dozens of distinct companies and organizations will be working at Oak Ridge. The EWP JHA initiative will help maintain a safe and productive workplace even in the face of organizational flux.❖

Steering Committee

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- Ensure the use of EWP in the transitioning process of the M&I and reindustrialization.
- Develop and use standardized performance metrics to advance the objectives of EWP and help validate successes.
- Provide representation and support to the National EWP Steering Committee.

According to David Milan, Director, LMES Safety and Health Organization and current committee chairman, "The establishment of this committee is a key step towards maximizing the benefit of the highly successful EWP program throughout the Reservation. I believe the Oak Ridge EWP Steering Committee can be an instrumental force for jump-starting EWP initiatives within OR organizations not already involved and promptly lead to better, more consistent work control processes across the reservation. I'm confident that EWP will continue to improve safety, efficiencies, and quality at Oak Ridge."

One key focus of the Steering Committee is to explore how work control mechanisms can be made more consistent across the Oak Ridge Reservation. While the committee recognizes that consistency for its own sake is not necessarily desirable across Oak Ridge organizations with their diverse missions and unique challenges, many organizations are indeed wrestling with common work control problems. Examples of common problems currently being addressed by the committee include how to incorporate optimal job hazard analyses up-front in the planning process and ensure "lessons learned" from similar work activities across the complex are considered by planners. The over-riding mission of the Steering Committee is to help solve these problems through proven EWP approaches as well as foster consistency when consistency will lead to benefits such as a safer overall workplace and Reservation-wide economies of scale.❖

MK-Ferguson's CAN DO! Program Joins EWP

A strategic alliance between MK-Ferguson's "CAN DO!" program and the Oak Ridge EWP program was recently announced by the Oak Ridge EWP Steering Committee. Team members of the respective efforts have started collaborating on important work control

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Portsmouth and Paducah Adopt EWP

Members of the Oak Ridge EWP Steering committee recently traveled to Portsmouth and Paducah to further these sites' involvement in the EWP program. A member of DOE's Office of Field Support (EH-53) accompanied Lou Tanner, LMES-ETTP, to the sites November 17-18, 1997, to discuss potential benefits through participation in the EWP Program. The goal of the trip was to review current work planning processes and to identify areas that would serve as a starting point for employing lessons learned from EWP initiatives at other Oak Ridge as well as sites throughout the Complex.

The Environmental Management and Enrichment Facilities (EMEF) located at Oak Ridge, Paducah, and Portsmouth are presently base-lining their management systems with respect to a program established to meet Defense Board recommendation 95-2, Integrated Safety Management Systems (ISMS). ISMS focuses on integrating safety into management and work practices; accomplishing work while protecting the employees, public, and environment; and ensuring continuous improvement of existing systems and processes for performing work safely. The EMEF ISMS program includes the principles of DOE Policy 450.3, Work Smart Standards 450.4, as well as tenets of the Oak Ridge Enhanced Work Planning initiative. The success of EMEF ISMS is dependent on full integration of these requirements. EMEF anticipates reaching successful ISMS implementation in part through capitalizing on proven EWP methodologies, tools and work products from other EWP initiatives at other DOE sites.

While the timing for Portsmouth and Paducah to formally join the Oak Ridge EWP program is being impacted by the fact that a new contractor is expected to take over by the end of this year, an on-going dialog and sharing of EWP tools is already being fostered. Plans are currently in effect for both Portsmouth and Paducah to obtain and evaluate several EWP tools available through the EWP network. In addition, beginning early 1998, Portsmouth will begin utilizing the services of experienced EWP facilitators from the EH Technical Assistance Program to help get the EWP program up and running. At Paducah, the head of the ETTP EWP effort, Lou Tanner, will assume a similar role. In this manner, the ISMS programs of both Portsmouth and Paducah can promptly benefit from proven EWP methods and tools.❖

CAN DO!

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issues and changes have been made to MK-Ferguson promotional materials to reflect the new "CAN DO/EWP" name.

The complementary missions of the two initiatives make the alliance a "natural fit" according to Lonnie Baldwin, Director-Environment, Safety and Health for MK-Ferguson, and member of the Oak Ridge EWP Steering Committee. "By joining the EWP program, we see a ready means to advance the fundamental goals of CAN DO!, which are to increase cooperation and open lines of communication to improve construction project performance in four key areas: safety, quality, cost, and schedule."

The alliance of the two initiatives is a "win-win" situation for both MK-Ferguson and the Oak Ridge EWP program. With over 35 CAN DO!/EWP committee members working among the 500 MK-Ferguson employees at Oak Ridge, it is expected that the program will renew efforts to improve safety, efficiencies, and quality. While the CAN DO!/EWP program will benefit from a formal tie to the larger EWP efforts both at Oak Ridge and throughout the national DOE Complex (and benefit from the many proven EWP strategies, tools, and work products), EWP will gain additional insight into work control issues within the construction/D&D industry--an area where EWP has not yet established a solid track record.

Throughout the national DOE Complex, the success of EWP programs has often been realized through alliances with other site initiatives with complementary goals. By joining forces, the CAN DO! and EWP programs will once again demonstrate that such partnerships are often the best ways to accomplish mutual goals of improving safety and enhancing work control processes.

EWP & CAN DO! WHY WORK TOGETHER?

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| <ul style="list-style-type: none">• DOE needs to expand EWP into construction. |
| <ul style="list-style-type: none">• CAN DO! objectives can be better accomplished through alliances with Oak Ridge EWP. |
| <ul style="list-style-type: none">• EWP and CAN DO! can better share lessons learned, tools, and work products. |

constitutes about 6 percent of the 100 or so “fully planned” job packages produced per week at Y-12. In addition, at the planning specialist’s option, reviews may also include packages prepared to less rigorous “skill of the craft” or “minor maintenance” criteria. Reviews can take place either before or after the work is actually performed.

The detailed reviews are performed using a check sheet which solicits responses to about 30 key questions about the quality of the job package. Examples of questions include: “Are all necessary forms and signatures included?,” “Is the job scope clearly identified in the work instructions?,” “Are material requirements and locations clearly identified?,” “Do all pages in package add value?,” and “Has the job been adequately reviewed for safety hazards?” When the Planning Specialist determines that a package is lacking, points are assigned for each apparent deficiency and feedback is given to the planner within one day. Discussions are held between the planner and planning specialist to ensure that concerns are understood and valid, as well as to identify what can be done to minimize future problems and, in general, how the planning process could be improved. Points are tracked anonymously by the FMO manager in the spirit of measuring overall trends and improvements rather than pin-pointing individual fault.

By establishing clear criteria for a planner’s success, the process for frequently evaluating progress toward a goal of “zero deficiencies,” and prompt feedback mechanisms which allow planners to both learn from mistakes and help improve the overall planning and evaluation process, dramatic results have been achieved. Over a seven-month period in 1997, reductions from an average of 1.2 errors per package to 0.1 errors per package have been observed in the maintenance planning group at Enriched Uranium Operations. For all six FMO planning groups, the errors per package has been reduced from an average of 4.5 to 0.6.

Sharing techniques for improving work control processes is a primary goal of Enhanced Work Planning at Oak Ridge and at other DOE sites around the nation. If you are interested in receiving copies of the job package evaluation forms or other details about this process, please contact Frank Fitzpatrick (pager: 1-800-374-4434; ext. 13091; e-mail: fgfitz@aol.com). ♦

SIMILAR GUIDING PRINCIPLES OF EWP & CAN DO!

ENHANCED WORK PLANNING	CAN DO!
<ul style="list-style-type: none"> • Involve workers up-front in planning. • Foster use of multi-disciplinary project teams. • Institutionalized communication throughout the organization and Complex. • Employ a risk-based, graded approach to work control. • Work to improve the status quo to make the work control process safer, faster, cheaper. 	<ul style="list-style-type: none"> • By working together, we can accomplish more. • The project team consists of journeymen, foremen, engineers, safety professionals, and any others who share responsibilities for successful project completion. • Line supervision must involve individuals performing the work in making decisions. • Individuals performing the work must help plan the work. • Each member of the team must continually seek to identify improvements in methods which will result in safer, better, faster, more cost effective construction projects.

Visit DOE's EWP Home Page

[HTTP://tis-nt.eh.doe.gov/wpohm/ewp/ewp2.htm](http://tis-nt.eh.doe.gov/wpohm/ewp/ewp2.htm)

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